PRODUCTION OF COLLOIDAL SILICA

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Abstract of **JP 4074707 (A)**

PURPOSE:To readily obtain colloidal silica not containing an alkali metal by adding an oxidizing agent and a mineral acid to a silicic acid aqueous solution free from the alkali metal and allowing the silica particles to grow in the presence of a basic organic compound, etc. CONSTITUTION:An alkali metal is removed from a silicic acid alkali metal salt aqueous solution having a silicic acid content of 1-10 wt.% and a pH of >=7. The treated solution is mixed with an oxidizing agent (hydrogen peroxide, hypochlorous acid or nitrous acid) to accelerate the polycondensation reaction of the silicic acid salt, and simultaneously mixed with a mineral acid (e.g. hydro chloric acid, nitric acid or hydrobromic acid) to stabilize a silicic acid aqueous solution.; One part of the stabilized aqueous solution is aged and mixed with ammonia or a basic organic compound to prepare a basic silicic aqueous solu tion. The silicic acid aqueous solution is dropwisely mixed with the remaining silicic acid aqueous solution containing the oxidizing agent and a mineral acid.